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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,874	01/30/2004	Masahide Yamashita	247707US2	4098

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT PAPER NUMBER

1756

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/766,874

Applicant(s)

YAMASHITA ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/27/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Election/Restrictions***

Applicant's election with traverse of Group I, claims 1-9 and 17-21 in the reply filed on 19 January 2006 is acknowledged. The traversal is on the ground(s) that the restriction requirement has not established that each of the claims could be examined without an undue burden, and thus each of the noted inventions and claims should be examined on their merits. This is not found persuasive because the search for the carrier and developer requires no search of the image developer, image forming apparatus, or process cartridge. Similarly, the carrier and developer containing the carrier are not a patentable limitation to the image developer, image forming apparatus, or process cartridge for the reasons given in the last Office action. Further, these components are not required to be present in the image developer, image forming apparatus, or process cartridge as these devices are "configured" to contain the carrier and developer. They are not physically recited as part of the image developer, image forming apparatus, or process cartridge. However, even if they were so recited, the materials worked upon (i.e., carrier and developer) are not structural components of the image developer, image forming apparatus, or process cartridge.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

The information disclosure statement filed 27 April 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the

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information referred to therein has not been considered for those references lined through.

Applicants are advised that references have been submitted that are not on listed on PTO-1449 but the references specified on the PTO-1449 form have not been supplied..

Specification

The disclosure is objected to because of the following informalities: In Table 1-1 (p. 41) it appears that the column heading " $\Sigma a/\delta b$ " should actually be " $\delta a/\delta b$ ". There also appears to be a typographical error in the last line of page 29.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant claims specify both a $\delta a/\delta b$ ratio for the carrier. The manner in which δa is determined is specified for claims 1 and those dependent while the device used to measure δa is specified in claims 17 and those dependent. In both cases, δa is measured by a method or a device means at 1000 Oe. δb is also specified at 1000 Oe. However, the method or device to measure δb is not specified. It is apparent from formula (1) that δa and δb must be different because the ratio is less than 1. The claims do not make clear, however, what different method or device is used to give δb . Because it is apparent from the claims that different methods or devices give different magnetization values it appears that the manner of measuring δb is

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critical to the defining the invention. The claims are indefinite as presented because the method and device used to define δb is not specified.

Allowable Subject Matter

Claims 1-9 and 17-21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: Kayamoto *et al.* in US Patent Application Publication 2002/0172884 discloses a resin coated carrier having a volume average size of 25 to 45 μm , a volume based particle size distribution of less than 1%, preferably less than 0.5 %, for carrier particles smaller than 22 μm , a magnetization of 67 to 88 emu/g in a kOe field, and a difference of 10 emu/g or less between scattered and remaining carrier particles (Abstract). Example 2 discloses a specific Mn ferrite carrier with a difference in magnetization of 3 emu/g. This carrier is mixed with toner to form a developer. This patent fails to disclose the true specific density of the carrier, the claimed ratio $D4/D1$, and the electric resistance R. It is also not apparent from Kayamoto that the claimed $\delta a/\delta b$, $\delta b \times pc$, and $\delta b/pc$ are inherently present for the carrier, noting that these values are also not specifically recited. Tamura *et al.* in US Patent 6,090,517 discloses a carrier coated having specific gravities of not more than 4.9 g/cc (col. 6, l. 6-20) with a magnetization of 45 to 80 emu/g at a magnetization of 1000 Oe (col. 8, l. 42-55) and a resistance of 10^7 to $10^{13} \Omega\text{cm}$ (col. 9, l. 1-9). However, the claimed $\delta a/\delta b$, $\delta b \times pc$, and $\delta b/pc$ are not disclosed and are not inherently present. Honjo *et al.* in US Patent 5,595,850 discloses Mn ferrite carriers and magnetization before and after scattering of the carrier was evaluated. However, the $\delta a/\delta b$, $\delta b \times pc$, and $\delta b/pc$ of the claims as well as other features are not disclosed.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
31 January 2006



**CHRISTOPHER RODEE
PRIMARY EXAMINER**